**Name of Test: nine weeks #1**

**Directions:**

**Choose the correct answer for each of the questions**

Students will demonstrate transportation service technology safety practices, including Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) requirements for transportation service and repair facilities

1. Your workplace would be a much safer place if you:

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| a. stop and document an unsafe situation in an emergency. |
| b. know what to do in an emergency. |
| c. rely on the designated safety officer to tell you what to do in an emergency. |
| d. complete the procedure as quickly as possible in an emergency. |

1. A test light is a tool for testing:

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| a. gauges. |  |
| b. circuits. |  |
| c. light bulbs. |  |
| d. fuses. |  |

1. When undertaking a troubleshooting exercise on a vehicle which of the following might you use?

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| a. A combination of these as required. |
| b. Videos, Microfiche, phone. |
| c. CD-ROMs and websites. |
| d. Manuals, textbooks, workbooks, magazines and journals. |

1. What makes a stud different from a bolt?

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| a. A stud has a hex head on one end. |
| b. A bolt can only be used on exhaust manifolds. |
| c. A stud has a thread on each end and no head. |
| d. A bolt must be tightened with an allen key. |

1. In an engine, the torque drives the:

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| a. fuel pump. |
| b. starter motor. |
| c. wheels. |
| d. engine.  e. none of the above |

1. Why should hacksaw blade tension be reduced when the hacksaw is not in use?

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| a. It prevents frame distortion. |
| b. It prevents blade warpage. |
| c. It prevents the blade stretching and cracking. |
| d. It makes it easier to change blades. |

1. Damage can be avoided when gripping a soft metal component in a vice by:

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| a. gripping it where damage doesn't matter. |
| b. gripping the metal very tightly. |
| c. gripping it using full contact area. |
| d. using soft jaws over the vice faces.  e. none of the above |

1. The basic unit of energy of the metric system is the:

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| a. newton. |
| b. pascal. |
| c. watt. |
| d. joule.  e. all of the above |

1. Total engine displacement is:

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| a. the sum of the volume of all cylinders of the engine from top dead center to bottom dead center. |
| b. the sum of all cylinders of the engine above top dead center. |
| c. the volume of one cylinder from top dead center to bottom dead center. |
| d. the sum of all cylinders of the engine from top dead center to bottom dead center plus the volume above top dead center. |

1. Asbestos is a heat-resistant material that is no longer used to manufacture insulations and brake linings because:

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| a. it aggravates skin and other allergies. |
| b. much cheaper alternatives have been invented. |
| c. it causes a very dangerous form of cancer. |
| d. reliable supplies are no longer readily available. |

1. What is the purpose of the flat washer used under a nut?

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| a. To allow a higher standard torque value. |
| b. To protect the surface underneath the nut. |
| c. To seal the thread to prevent oil leaks. |
| d. To prevent the nut from working loose.  e. all of the above |

1. What type of automotive battery cannot be topped up with electrolyte?

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| a. Low maintenance. |  |
| b. Nickel metal hydride. |  |
| c. All of these types. |  |
| d. Sealed. |  |

e. none of the above

1. What punch is designed to mark metal immediately prior to drilling?

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| a. A starter drift pin punch. |
| b. A drill point punch. |
| c. A center punch. |
| d. A prick punch. |

1. VIN decoding information is usually located in the:

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| a. customer sales information. |
| b. general information section of a manufacturer's parts or service manual. |
| c. service manual index. |
| d. labor guide. |

e. none of the above

1. Light vehicle vans can be based on common \_\_\_\_\_\_\_\_ designs.

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| a. sedan or saloon |
| b. station wagon |
| c. coupe |
| d. general goods transport vehicle |

1. An oxyacetylene gauge set has:

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| a. a gas flow gauge. |
| b. a cylinder pressure and working pressure gauge for each cylinder. |
| c. a working pressure gauge. |
| d. a cylinder pressure gauge. |

e. all of the above

1. Which has greater mass: an Imperial ton, which contains 2240 lbs, or a metric tonne, which contains 1000 kg?

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| a. The metric ton. |
| b. They are exactly equivalent in mass. |
| c. Neither is a measure of mass. |
| d. The Imperial ton. |

1. Vehicle openings have to be secured and may require a remote switch or lever to be activated. This is

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| a. cable. |  |
| b. all of these. |  |
| c. vacuum solenoid. |  |
| d. electric solenoid. |  |

e.none of the above

1. *Air density is expressed as a ratio of what*?

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| a. Oxygen percentage per unit volume. |
| b. Mass times air pressure. |
| c. Mass per unit volume. |
| d. Volume times air pressure. |

1. When diagnosing computer-related problems with a scan tool, it is useful to find information about new faults by first checking:

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| a. parts manuals. |  |
| b. service manuals. |  |
| c. labor guides. |  |
| d. service bulletins. |  |

1. There are three anchor points on:

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| a. 'sash' type seatbelts. |
| b. 'lap' type seatbelts. |
| c. 'lap and sash' type seatbelts. |
| d. both 'lap and sash' and 'lap' type seatbelts. |

1. When using an engine hoist, the sling should be long enough so when you lift the engine the angle at the top of the sling is about:

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| a. 45 degrees. |  |
| b. 80 degrees. |  |
| c. 90 degrees. |  |
| d. 60 degrees. |  |

1. Carbon monoxide emissions are produced during combustion as a result of:

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| a. excessive oxygen. |
| b. incomplete combustion of nitrous oxide residues. |
| c. incomplete combustion of carbon and carbon compounds. |
| d. using fuel with an incorrect octane rating. |

1. The further the arms and legs of an engine hoist are extended, the lower the lifting capacity of the hoist.

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| a. FALSE |
| b. TRUE |

1. How should you remove hardened or baked-on dirt and grease from the paintwork when cleaning a vehicle?

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| a. Allow the undiluted degreaser to work on the paintwork for a minute before washing off and re-apply, if necessary. |
| b. Allow the degreaser to work on the paintwork overnight before washing off. |
| c. Scratch off contaminant with a scraper. |
| d. Allow the degreaser to work on the paintwork for a minute before washing off and re-apply if necessary. |

1. When should you fill out an accident report?

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| a. When the injured person was not using equipment correctly, according to manufacturer's instructions. |
| b. As soon as possible after the accident has occurred. |
| c. Once the medical report confirms that the accident was sufficiently serious. |
| d. When no supervisor was present. |

1. If water is put under higher than atmospheric pressure, it:

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| a. doesn't boil. |
| b. boils at a lower temperature. |
| c. boils at standard 'boiling point'. |
| d. boils at a higher temperature. |

e.none of the above

1. What are most pressure testers or gauges designed to read at atmospheric pressure as a base measurement?

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| a. 0 |  |
| b. 14.7 |  |
| c. 10 |  |
| d. 1 |  |

1. How do you test the high-pressure water flow from a pressure cleaner?

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| a. Point the wand toward a concealed part of the chassis and test that the water flows at high pressure. |
| b. Point the wand toward the ground and test that the water flows at high pressure. |
| c. Point the wand toward the engine bay and test that the water flows at high pressure. |
| d. Point the wand toward your hand and test that the water flows at high pressure. |

1. The power range of an engine can be described by its:

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| a. load factor. |
| b. lag factor. |
| c. power factor. |
| d. engine factor. |

1. Good conductors have:

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| a. semiconductor properties. |
| b. high resistance. |
| c. infinite resistance. |
| d. low resistance. |

1. Why should you always hold a micrometer by the insulating block on the frame?.

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| a. Because heat from your hand will cause the frame to expand and give an inaccurate reading. |
| b. Because if held in any other way, the micrometer measurements cannot be read accurately. |
| c. Because it is the most comfortable position to hold the micrometer. |
| d. Because heat from your hand will cause the frame to expand and may cause the components to seize up. |

1. Once a piece of metal is no longer 'Red Hot' it is safe to touch.

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| a. FALSE |  |
| b. TRUE |  |

1. Torque specifications for fasteners such as bolts are found in the:

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| a. repair manual. |
| b. parts manual. |
| c. vehicle identification booklet. |
| d. owner's handbook. |

1. In essay form describe as many benefits as possible of working for a large dealership or service facility as an automotive service technician.